

CLAIMS

1. A package for an elongate surgical device, comprising:
an elongate tube having walls defining a lumen between a first end and a second end of the tube;

5 the tube being formed into a coiled configuration with a first coiled portion disposed adjacent to a second coiled portion; and

a weld bonding the first coiled portion to the second coiled portion in a fixed relationship; the weld being of sufficient strength to prevent peeling the first coiled portion from the second coiled portion to maintain the coil configuration of the tube.

10 2. The package recited in Claim 1 wherein the weld is a thermal weld.

3. The package recited in Claim 2 wherein:

the tube is formed into a stack of coils; and

15 the weld comprising a single continuous weld retaining the coils in a fixed relationship.

4. The package recited in Claim 2 further comprising:
a backing card carrying the tube in the coiled configuration.

20 5. The package recited in Claim 4 further comprising:
a pouch forming with the backing card a sterilizable, hermetically sealed, enclosure for the coiled tube.

25 6. The package recited in Claim 4 wherein the elongate tube and the backing card is composed of a common material.

7. The package recited in Claim 1 further comprising:
a retaining accessory coupled to the first end of the elongate tube.

8. The package recited in Claim 7, wherein the elongate tube and the retaining accessory is composed of a common material.

9. A method for packaging an elongate surgical device having an outside diameter, comprising the steps of:

providing an elongate tube having a tube wall with an inside diameter greater than the outside diameter of the device;

coiling the tube to move a first tube portion into an adjacent relationship with a second tube portion; and

bonding the tube walls of the adjacent tube portion without occluding the tube to form a fixed relationship between the first tube portion and the adjacent second tube portion, and to maintain the tube in a coiled configuration.

10. The method recited in Claim 9 wherein the bonding step includes the step of thermally bonding the tube portions to form at least one weld between the tube portions.

11. The method recited in Claim 9 wherein the bonding step includes the step of:

joining the tube portions with a bridge; and

bonding the bridge to the first tube portion and the second tube portion.

12. The method recited in Claim 9 further comprising the step of:

providing a backing card; and

attaching the tube in the coiled configuration to the backing card.

13. The method recited in Claim 9 wherein the coiling step includes the step of forming the tube into a plurality of coils having a common diameter and defining a stack of coils.

14. The method recited in Claim 13 wherein the bonding step includes the step of bonding the adjacent tube portions at a plurality of discreet locations around the stack of coils.

5 15. The method recited in Claim 13 wherein the bonding step includes the step of welding the adjacent coil portions to form a single continuous weld around the stack of coils.

10 16. The method recited in Claim 9 further comprising the step of:
inserting the surgical device into the tube in the coiled configuration.

17. A method for making a package for an elongate surgical device, comprising the steps of:

15 providing an elongate tube having walls defining a lumen between a first end
and a second end of the tube;

attaching the first end of the tube to a fixture having at least one heating station
and a turntable rotatable relative to the heating station;

rotating the turntable to form the tube into at least one coil having adjacent
coiled portions; and

20 bonding the adjacent coiled portions as they rotate by the heat station.

18. The method recited in Claim 17 wherein the rotating step includes the step of forming the tube into a stack of coils.

25 19. The method recited in Claim 18 wherein the bonding step includes the step of bonding each of the coils in the stack of coils to an adjacent coil in the stack of coils to form at least one thermal bond.

30 20. The method recited in Claim 17 further comprising the step of:
heating the adjacent coil portions to thermally bond the coil portions.

21. The method recited in Claim 20 wherein the heating step includes the step of directing heated air onto the adjacent coiled portions;

22. The method recited in Claim 20 wherein the heating step includes the step of contacting the adjacent coiled portions with a heating element.

23. The method recited in Claim 20 wherein the applying step includes the step of directing a laser beam onto at least one of the adjacent coiled portions.

24. The method recited in Claim 20 wherein the heating step includes the step of:

plasticizing the adjacent coiled portions to form a non-peelable bond between the adjacent coiled portions.

25. The method recited in Claim 17 further comprising the step of thermally bonding a retention accessory to the tube.

26. The method recited in Claim 17 further comprising the step of thermally bonding a backing card to the tube.